## REMARKS

In the Official Action mailed on **5 January 2007**, the Examiner reviewed claims 1-3, 5, 7-14, 16, 18-25, 27, and 29-33. Claims 1-3, 5, 7-14, 16, 18-25, and 29-33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Frey, Jr. et al (USPN 5,201,044, hereinafter "Frey") in view of Fleming (USPN 6,023,772, hereinafter "Fleming").

### Rejections under 35 U.S.C. §103(a)

Independent claims 1, 12, and 23 were rejected as being unpatentable over Frey in view of Fleming.

Examiner maintained the previous rejections asserting that the following feature is not recited in the rejected claims, i.e., that the present invention teaches performing **only** those operations stored in the volatile memory of the second server.

Applicant has amended claims 1, 12, and 23 to clarify that the present invention teaches **replaying those operations that are in the log in volatile memory.** This is supported by lines 9-12 in page 10 of the instant application which clarifies that the system replays file system operations that are in the log, as well as in FIG. 1 of the instant application, which further clarifies that the log (item 120) is maintained **only** in the volatile memory of the secondary server.

The present invention is beneficial because it allows fast recovery of file operations on the secondary server if the primary server fails (specifically without incurring the cost of possibly millions of additional processor cycles that will be needed to complete recovery of file operations in the case that the log file is stored in non-volatile storage) (see page 2, lines 15-17 of the instant application).

Applicant respectfully points out that Frey teaches storing the log of file operations of distributed transactions involving multiple nodes at any one node. Applicant respectfully points out that Frey does not teach enabling reconstruction

11

using contents of the log file **in volatile memory** in order to speed the process. In addition, Applicant respectfully submits that while Fleming teaches the use of a secondary system for failover recovery, there is nothing within Frey or Fleming, either separately or in concert, which discloses recovery using only the file operations that are stored in the volatile memory of a node in order to recover without having the delay and processor cycle cost that will occur if this is not explicitly enforced.

The combined system of Frey and Fleming cannot allow recovery of file operations from a log file specifically without incurring disk access to non-volatile storage.

Accordingly, Applicant has amended independent claims 1, 12, and 23 to clarify that the present invention teaches replaying those operations that are in the log in volatile memory. These amendments find support in page 10, line 9-12; and FIG. 1, item 120, of the instant application. New dependent claims 34-36 have been added that include limitations from previously canceled dependent claims 6, 17, and 28. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 12, and 23 as presently amended are in condition for allowance. Applicant also submits that claims 2, 5, 7-11, and 34, which depend upon claim 1, claims 13, 16, 18-22, and 35, which depend upon claim 12, and claims 24, 27, 29-33, and 36, which depend upon claim 23, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

## CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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